

***Utilization Statistics
for the
North Carolina Health Choice
Program***

October 1998- September 2001

***Corporate Analysis and Risk Assessment
December 17, 2001***



**BlueCrossBlueShield
of North Carolina**

**An Independent Licensee of the
Blue Cross and Blue Shield Association**

NC Health Choice Annual Utilization Study October 1998 Through September 2001

Introduction

This document provides health care cost and utilization data for members of the North Carolina Health Choice (NCHC) group for services incurred from October 1998 through September 2001. The data have not been adjusted for outstanding claims.

Norms are based on all dependent youth (under age 19) from the State of North Carolina Teachers' and State Employees' Comprehensive Major Medical Plan. Norms have not been age and sex adjusted.

"Costly" admissions (admissions incurring more than \$50,000 in allowed charges or with a length of stay in excess of 30 days) have been excluded from utilization rate and charge statistics. However, payment data include these admissions. Table 17 lists the costly admissions.

Because there were so few members in the Extended Coverage segment, their utilization and cost behaviors are not analyzed. However, their data are included in the tables.

Demographics

The average monthly enrollment from October 2000 through September 2001 (FY 2001) was 68,388 members. Non-Copay members comprised nearly two-thirds of this total. The sex distribution of both segments was about half male and half female. About half of all members were between 6 and 12 years old. A slight majority of members were white (52 percent), while 35 percent were black.

Membership rose 4 percent above that of FY 2000 (October 1999 through September 2000).

Inpatient Utilization and Average Charges

Utilization decreased during FY 2001 due to declining utilization in each major segment, particularly in the Non-Copay segment. Utilization was below the norm for both segments.

The average charge per admission fell due to similar decreases for both the Copay and the Non-Copay segments. The average charge per day dropped slightly.

Respiratory diseases was the most prevalent diagnostic category, accounting for more than 20 percent of all admissions. Injury and poisoning, digestive diseases, mental disorders, and endocrine diseases each accounted for another 10 percent of admissions.

Outpatient Utilization and Average Charges

In both the hospital outpatient and ambulatory surgery settings, utilization was below the norm, while emergency department utilization exceeded the norm in FY 2001. Utilization increased slightly for the hospital outpatient and emergency department settings, and remained stable in the ambulatory surgery setting between FY 2000 and FY 2001.

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In the emergency room setting the utilization rates for non-urgent and urgent conditions were well above their norms, while the rate for emergent conditions was much closer to its norm.

In all settings, and in both segments, the average charge per visit was below the norm.

Office Visit Utilization and Average Charges

The office visit utilization rate increased, reflecting increases in the visit rates both to specialists and to primary care physicians. Utilization for both settings was below the norm. On the other hand, the average charge per visit (which increased slightly in both settings) was consistent with the norm.

Overall, outpatient utilization of mental health services was higher than the norm. The drug abuse visit rate rose significantly and was far above the norm in FY 2001.

Payments

Payments per member per month increased in FY 2001 and were slightly higher than the norm. As this is preliminary data which has not been adjusted to account for outstanding claims, it is to be expected that payments and utilization will be higher when all claims have been filed.

Institutional payments for both segments increased slightly due to fairly small increases in utilization and average payments in the hospital outpatient and emergency department settings. For both segments, institutional payments were below the norm.

The increase in professional payments was primarily attributable to higher payments for office visits and prescription drugs. Professional payments were much higher than the norm.

Payments for mental disorders, diseases of the nervous system, respiratory diseases, ill defined conditions, and payments for "other" (including drugs) were all higher than the norm.

Costly admissions (admissions which incurred costs greater than \$50,000 or hospital stays greater than 30 days) added nearly \$2 to the pmpm payment.

Table 1
NC Health Choice
Demographics - Average Annual Enrollment
October 2000 Through September 2001

Age Groups

	<u>Non-Copay</u>	<u>Copay</u>	<u>Ext Cvg</u>	<u>Total Group</u>
0	1	22	0	24
1 - 5	5,810	7,798	24	13,633
6 - 12	23,719	10,359	37	34,115
13 - 18	14,068	6,074	28	20,170
19 +	330	117	1	447
Total	43,928	24,370	90	68,388

Gender

	<u>Non-Copay</u>	<u>Copay</u>	<u>Ext Cvg</u>	<u>Total Group</u>
Female	21,663	11,957	38	33,658
Male	22,265	12,413	51	34,730
Total	43,928	24,370	90	68,388

Ethnicity

	<u>Non-Copay</u>	<u>Copay</u>	<u>Ext Cvg</u>	<u>Total Group</u>
Asian	529	264	0	793
Black	16,760	6,847	19	23,625
Hispanic	2,858	1,781	2	4,641
Indian	1,043	405	3	1,451
White	21,117	14,182	62	35,361
Other	1,352	747	4	2,103
Unknown	269	145	0	414
Total	43,928	24,370	90	68,388

Table 2
NC Health Choice
Demographics - Percentage of Membership
October 2000 Through September 2001

Age Groups

	<u>Non-Copay</u>	<u>Copay</u>	<u>Ext Coverage</u>	<u>Total Group</u>
0 years	0%	0%	0%	0%
1 - 5 years	13%	32%	27%	20%
6 - 12 years	54%	43%	41%	50%
13 - 18 years	32%	25%	31%	29%
19 + years	1%	0%	1%	1%

Gender

	<u>Non-Copay</u>	<u>Copay</u>	<u>Ext Coverage</u>	<u>Total Group</u>
Female	49%	49%	43%	49%
Male	51%	51%	57%	51%

Ethnicity

	<u>Non-Copay</u>	<u>Copay</u>	<u>Ext Coverage</u>	<u>Total Group</u>
Asian	1%	1%	0%	1%
Black	38%	28%	21%	35%
Hispanic	7%	7%	2%	7%
Indian	2%	2%	3%	2%
White	48%	58%	69%	52%
Other	3%	3%	5%	3%

Figure 1: Membership Distribution by Age

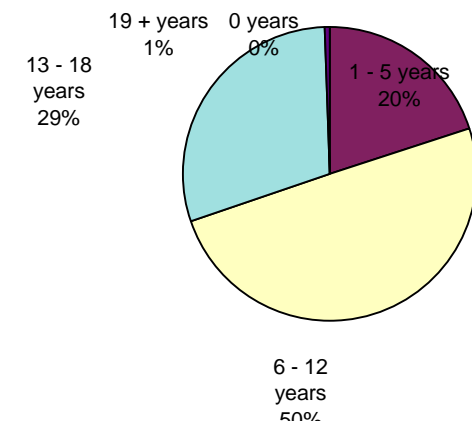
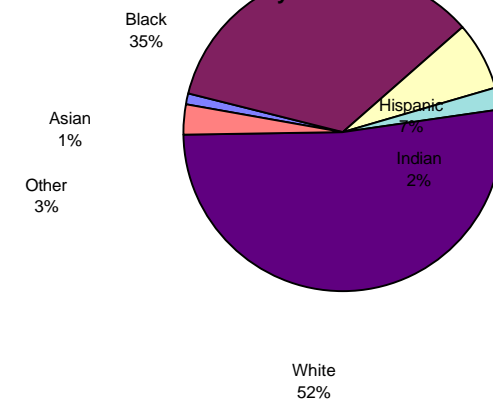
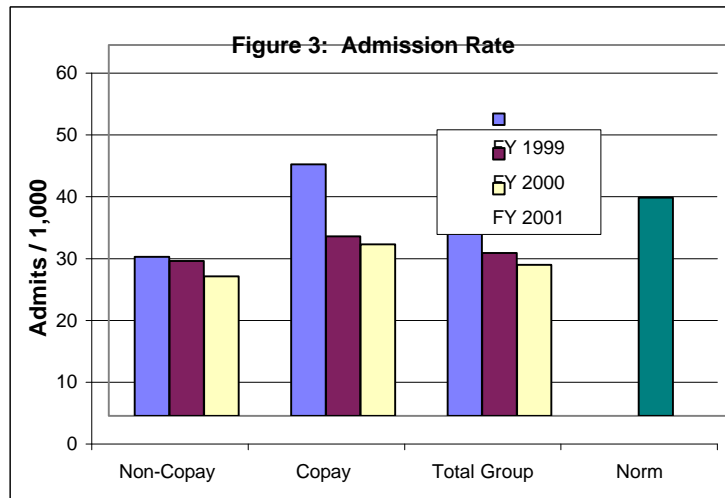


Figure 2: Membership Distribution by Ethnicity



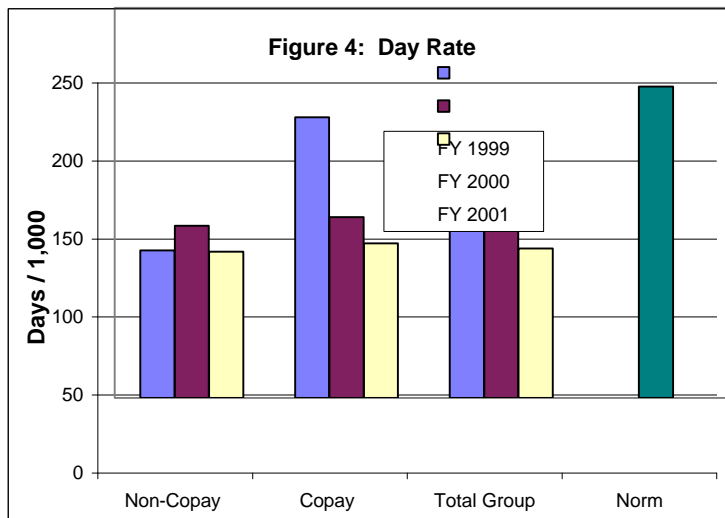
NC Health Choice Inpatient Utilization October 1998 Through September 2001



The admission rate for the total group fell 7 percent to 24.4 admissions per 1,000 members (Table 3). The rate was 31 percent below the norm.

The admission rate for the Copay segment fell 5 percent, and that of the Non-Copay segment decreased 10 percent to 22.6. Both were well below the norm.

Respiratory diseases accounted for more than one-fifth of all admissions (Table 4). The admission rate for neoplasms returned to a level comparable to the 1999 level, following a spike last year (data not shown). The admission rate for endocrine disorders was much higher than the norm, while admission rates for pregnancies and perinatal conditions have been far below the norm each year.



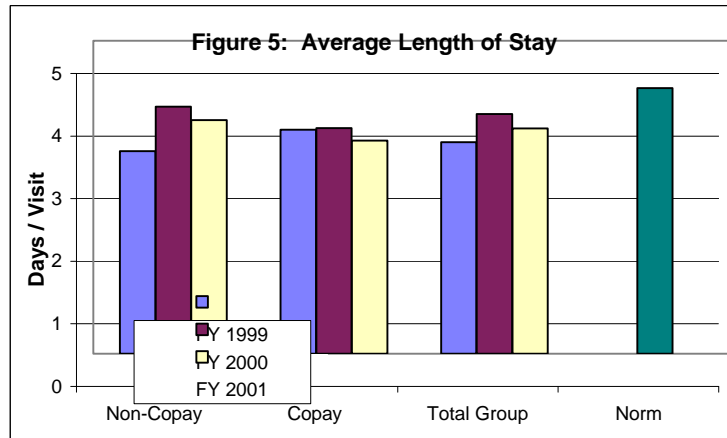
The day rate for the total group decreased 15 percent to 95.8 hospital days per 1,000 members. The rate was 52 percent below the norm.

Each segment experienced a 15 percent decrease in the day rate, although the copay segment's rate was slightly higher. Both were well below the norm.

Since this is preliminary data, it is to be expected that 2001 utilization rates will rise as all claims are filed.

NC Health Choice Inpatient Utilization October 1998 Through September 2001

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The average length of stay for the total group decreased 6 percent to 3.6 hospital days per visit. The rate was 15 percent below the norm.

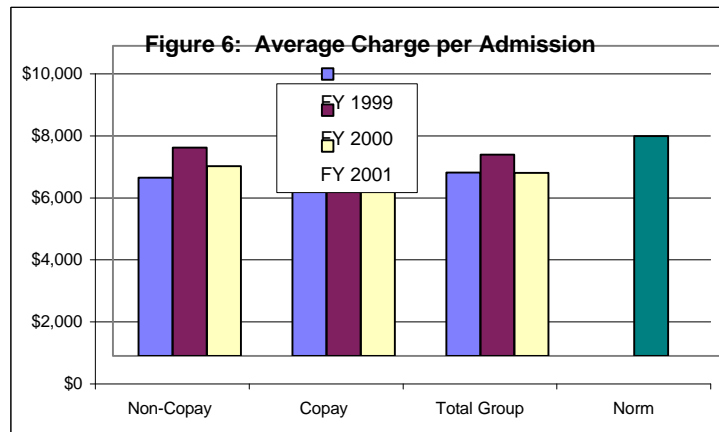
The average length of stay decreased 5 percent to 3.7 days for the Non-Copay segment and decreased 6 percent to 3.4 days for the Copay segment. Although the average length of stay for the Non-Copay segment was higher than for the Copay segment, they were both below the norm.

As in each previous fiscal year, UNC Hospitals had the most admissions in FY 2001 (Table 5). In addition, UNC Hospitals had the third-highest average allowed charge per admission and the fourth-highest average length of stay. Pitt County Memorial Hospital had the highest average length of stay, and Duke University Hospital had the highest average charge.

Mecklenburg and Guilford Counties had the highest number of admissions (Table 6). Mecklenburg County also had the greatest membership. Among counties with more than 10 admissions, Craven County had the greatest average length of stay (16.6 days) as well as the highest average allowed charge (\$27,560 per admission).

The inpatient utilization rates for mental disorders decreased both for acute care hospitals (Table 7) and for psychiatric facilities (Table 8) in each of the major segments. Overall utilization was just under the norm in the acute care setting, but exceeded the norm in the specialty psychiatric setting.

NC Health Choice Inpatient Charges October 1998 Through September 2001

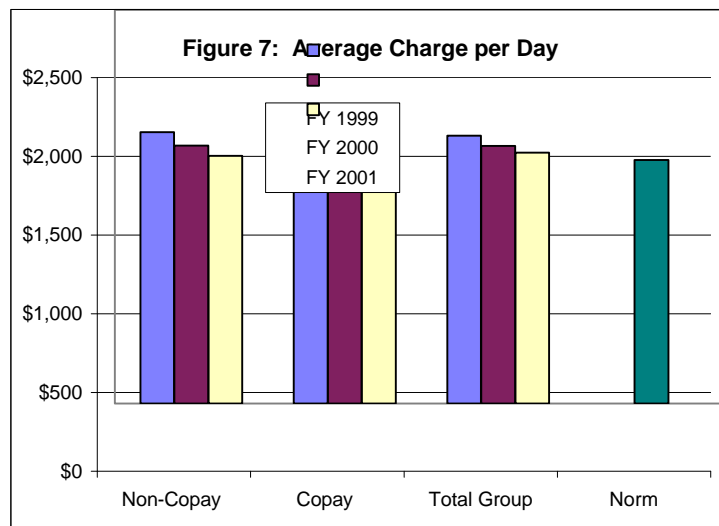


The average charge per admission during FY 2001 decreased 9 percent to \$5,901, and remained well below the norm (Table 3).

The decrease in the average charge was attributable to similar drops in the average charge for both the Non-Copay and the Copay segments.

As noted earlier, of the counties with at least 11 admissions, Craven County had the highest average charge per admission. Pasquotank County had the lowest (Table 6).

The average charge per mental health admission fell 4 percent for acute care hospitals and was slightly below the norm (Table 7). Among psychiatric hospitals, the average charge fell 10 percent but was consistent with the norm (Table 8).



The average charge per day decreased 3 percent to \$1,594 (Table 3). This was 3 percent higher than the norm.

The average charge for both segments decreased slightly in FY 2000.

Among acute care hospitals, the average charge per day for psychiatric admissions increased 5 percent in FY 2000 (Table 7). It was slightly above the norm. The average charge per day at psychiatric hospitals increased 12 percent and was close to the norm (Table 8).

Table 3
NC Health Choice
Inpatient Utilization and Charge Statistics, Acute-Care General Hospitals
Oct. 1998 - Sept. 2001

		<u>Participants</u>	<u>Admissions</u>	<u>Days</u>	<u>Admissions/ 1000</u>	<u>Days/ 1000</u>	<u>Average Length of Stay ¹</u>	<u>Average Charge/Adm. ²</u>	<u>Average Charge/Day ²</u>
Non-Copay	1999	23,701	610	1960	25.7	94.6	3.2	\$5,750	\$1,724
	2000	45,104	1129	4973	25.0	110.3	3.9	\$6,714	\$1,639
	2001	43,928	992	4120	22.6	93.8	3.7	\$6,115	\$1,573
Copay	1999	10,866	442	1560	40.7	179.9	3.6	\$6,134	\$1,674
	2000	20,859	606	2417	29.1	115.9	3.6	\$6,098	\$1,638
	2001	24,370	676	2415	27.7	99.1	3.4	\$5,577	\$1,625
Ext Coverage	1999	--	--	--	--	--	--	--	--
	2000	45	6	27	133.3	600.0	4.5	\$4,615	\$1,009
	2001	90	4	17	44.4	188.9	4.3	\$7,862	\$1,850
Total Group	1999	34,567	1,052	3,520	30.4	121.4	3.4	\$5,911	\$1,702
	2000	66,008	1,741	7,417	26.4	112.4	3.8	\$6,492	\$1,635
	2001	68,388	1,672	6,552	24.4	95.8	3.6	\$5,901	\$1,594
Norm	2001	--	--	--	35.3	199.5	4.2	\$7,095	\$1,547

¹ Excludes cases in which length of stay is greater than 30 days.

² Includes both institutional charges (DRG prices) and professional charges (allowed charges).

Note: Excludes cases in which total charges exceed \$60,000.

Table 4
NC Health Choice
Inpatient Utilization Statistics by Diagnostic Classification
Acute Care Hospitals
October 2000 Through September 2001

	<u>Admissions per 10,000</u> <u>Members</u>		<u>Percentage of Total</u> <u>Admissions</u>	
	<u>NCHC</u>	<u>Norm</u>	<u>NCHC</u>	<u>Norm</u>
Infectious and Parasitic Diseases	18.7	20.6	7.7%	5.8%
Neoplasms	5.3	13.0	2.2%	3.7%
Endocrine, Nutritional and Metabolic Diseases and Immunity Disorders	25.4	19.3	10.4%	5.5%
Diseases of Blood and Blood-Forming Organs	6.0	9.3	2.5%	2.6%
Mental Disorders	25.4	26.9	10.4%	7.6%
Diseases of the Nervous System and Sense Organs	7.9	6.5	3.2%	1.8%
Circulatory Diseases	3.1	2.8	1.3%	0.8%
Respiratory Diseases	51.9	55.5	21.2%	15.7%
Digestive Diseases	26.8	30.9	10.9%	8.7%
Genitourinary Diseases	11.4	11.0	4.7%	3.1%
Pregnancies	2.3	24.9	1.0%	7.1%
Skin Diseases	5.0	5.1	2.0%	1.5%
Musculoskeletal Diseases	5.6	6.8	2.3%	1.9%
Congenital Anomalies	4.7	17.8	1.9%	5.0%
Perinatal Conditions	0.1	48.8	0.1%	13.8%
Ill-Defined Conditions	15.1	16.4	6.2%	4.7%
Injury and Poisoning	29.1	36.9	11.9%	10.4%
Other	0.7	0.8	0.3%	0.2%

Table 5
NC Health Choice
Top 25 Most Frequently Used Hospitals
October 2000 Through September 2001

	<u>Number of Admissions</u>	<u>Average Length of Stay</u>	<u>Average Allowed Charge per Admission</u>
U N C HOSPITALS	135	7.10	\$11,214
CAROLINAS MED CTR	90	3.37	\$5,873
NORTH CAROLINA BAPTIST HO	89	3.63	\$7,388
MEMORIAL MISSIO N HOSP	82	3.91	\$4,753
COLUMBUS CO HOS P	66	2.55	\$2,902
THE MOSES CONE MEMORIAL	57	3.67	\$3,278
PITT CO MEMORIA L HOSP	53	7.60	\$11,262
DUKE UNIVERSITY HOSPITAL	48	7.38	\$15,809
OUT OF STATE	38	7.39	\$9,132
WAKE MED	38	3.34	\$3,607
NEW HANOVER REG MEDICAL CT	36	2.86	\$3,968
CAPE FEAR VALLE Y MED CTR	36	2.50	\$3,178
GASTON MEM HOSPITAL	30	4.23	\$4,374
NORTHEAST MED CENTER	30	2.60	\$2,730
PRESBYTERIAN HO SP	29	4.17	\$4,043
FIRSTHEALTH MOORE REGI	27	2.70	\$3,187
LENOIR MEM HOSP ITAL	27	2.81	\$2,809
SOUTHEASTERN GE N HOSP	26	2.69	\$2,985
FRYE REGIONAL MED CTR	25	6.52	\$5,052
HIGH POINT REGIONAL	24	2.50	\$4,208
ALBEMARLE HOSPI TAL	24	2.67	\$2,664
FORSYTH MEMORIA L HOSP	21	5.67	\$6,319
WATAUGA MEDICAL CENTER	21	4.43	\$4,558
WAYNE MEMORIAL HOSPITAL	21	3.67	\$3,969
BETSY JOHNSON REG HOSP	21	3.10	\$2,902
ALL OTHERS	578	2.99	\$3,309

Note: All outlier admissions are included.

Table 6
NC Health Choice
Utilization by County of Residence
October 2000 Through September 2001

	<u>Members</u>	<u>Admissions</u>	<u>Average Length of Stay</u>	<u>Average Charge per Admission</u>
ALAMANCE	1,021	27	4.07	\$3,885
ALEXANDER	273	5	4.20	\$4,302
ALLEGHANY	139	5	8.00	\$8,978
ANSON	235	18	3.39	\$4,124
ASHE	394	19	2.68	\$7,256
AVERY	374	8	3.25	\$4,476
BEAUFORT	525	13	2.46	\$2,895
BERTIE	275	5	2.40	\$2,354
BLADEN	509	10	5.90	\$7,119
BRUNSWICK	887	27	2.19	\$3,956
BUNCOMBE	2,101	56	4.50	\$5,687
BURKE	556	8	3.38	\$3,472
CABARRUS	1,008	29	3.55	\$5,126
CALDWELL	458	18	2.89	\$5,776
CAMDEN	70	2	3.00	\$2,964
CARTERET	720	21	5.57	\$10,972
CASWELL	133	3	3.33	\$5,164
CATAWBA	1,071	33	3.94	\$5,821
CHATHAM	303	6	3.83	\$4,596
CHEROKEE	443	17	2.41	\$3,378
CHOWAN	165	5	1.80	\$3,641
CLAY	146	4	2.50	\$2,910
CLEVELAND	771	12	2.17	\$3,478
COLUMBUS	910	76	2.72	\$4,008
CRAVEN	876	18	16.61	\$27,560
CUMBERLAND	2,396	57	5.00	\$10,467
CURRITUCK	169	7	4.14	\$5,020
DARE	332	4	6.25	\$9,919
DAVIDSON	1,118	19	2.58	\$4,404
DAVIE	269	5	3.60	\$6,686
DUPLIN	560	9	3.67	\$9,748
DURHAM	1,271	24	4.75	\$7,555
EDGECOMBE	629	10	2.80	\$6,812
FORSYTH	2,025	43	4.26	\$8,433
FRANKLIN	456	5	2.60	\$5,418
GASTON	1,161	33	3.82	\$6,303
GATES	123	1	2.00	\$7,452
GRAHAM	182	7	2.14	\$5,767

Table 6
NC Health Choice
Utilization by County of Residence
October 2000 Through September 2001

	<u>Members</u>	<u>Admissions</u>	<u>Average Length of Stay</u>	<u>Average Charge per Admission</u>
Blue Cross Blue Shield of North Carolina Dec. 17, 2001				
GRANVILLE	319	2	1.00	\$1,901
GREENE	198	2	1.00	\$8,108
GUILFORD	3,147	81	4.19	\$7,486
HALIFAX	563	11	5.00	\$8,243
HARNETT	672	23	3.00	\$5,648
HAYWOOD	584	18	3.94	\$5,274
HENDERSON	949	27	4.41	\$6,501
HERTFORD	263	4	4.50	\$13,130
HOKE	314	5	3.00	\$9,491
HYDE	103	5	2.40	\$4,355
IREDELL	684	21	3.05	\$6,165
JACKSON	390	11	2.00	\$3,603
JOHNSTON	943	27	2.19	\$4,762
JONES	210	3	5.00	\$8,236
LEE	513	4	5.25	\$17,237
LENOIR	711	31	4.29	\$5,341
LINCOLN	435	13	3.46	\$7,046
MACON	507	12	4.17	\$10,619
MADISON	305	10	3.50	\$5,699
MARTIN	264	4	1.75	\$3,812
MCDOWELL	408	3	3.00	\$4,684
MECKLENBURG	4,595	87	3.79	\$7,403
MITCHELL	222	4	3.25	\$2,823
MONTGOMERY	352	6	3.00	\$3,142
MOORE	794	23	2.70	\$4,244
NASH	977	19	3.26	\$3,914
NEW HANOVER	1,221	17	3.41	\$4,724
NORTHAMPTON	267	7	6.14	\$9,073
ONSLOW	1,276	23	5.00	\$10,187
ORANGE	543	20	5.20	\$4,852
PAMLICO	140	4	2.25	\$2,293
PASQUOTANK	470	14	2.21	\$2,568
PENDER	517	8	6.13	\$11,281
PERQUIMANS	163	3	6.67	\$8,798
PERSON	299	10	3.30	\$8,954
PITT	982	19	3.58	\$6,721
POLK	185	6	5.00	\$4,772
RANDOLPH	959	35	5.77	\$9,771

Table 6
NC Health Choice
Utilization by County of Residence
October 2000 Through September 2001

	<u>Members</u>	<u>Admissions</u>	<u>Average Length of Stay</u>	<u>Average Charge per Admission</u>
Corporate Analysis and Risk Assessment Blue Cross Blue Shield of North Carolina Dec. 17, 2001				
RICHMOND	539	37	3.35	\$3,933
ROBESON	1,759	39	3.28	\$8,111
ROCKINGHAM	641	20	3.55	\$7,394
ROWAN	862	27	2.93	\$4,435
RUTHERFORD	509	8	10.13	\$22,046
SAMPSON	627	11	4.27	\$4,294
SCOTLAND	442	8	5.13	\$8,527
STANLY	507	13	3.69	\$5,812
STOKES	315	11	2.73	\$3,837
SURRY	775	16	3.31	\$6,215
SWAIN	400	9	4.22	\$4,337
TRANSYLVANIA	350	7	6.71	\$10,153
TYRRELL	112	1	5.00	\$3,468
UNION	852	20	2.55	\$5,210
VANCE	573	10	3.00	\$5,077
WAKE	3,642	49	3.47	\$5,853
WARREN	282	4	7.50	\$25,211
WASHINGTON	183	5	2.40	\$5,166
WATAUGA	323	10	6.10	\$8,239
WAYNE	1,259	21	4.19	\$8,025
WILKES	480	15	3.07	\$6,996
WILSON	776	18	5.06	\$11,919
YADKIN	286	3	4.00	\$7,165
YANCEY	311	15	3.07	\$4,667

Table 6
NC Health Choice
Utilization by County of Residence
October 2000 Through September 2001

<u>Members</u>	<u>Admissions</u>	<u>Average Length of Stay</u>	<u>Average Charge per Admission</u>
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Corporate Analysis and Risk Assessment
Blue Cross Blue Shield of North Carolina
Dec. 17, 2001

Table 7
NC Health Choice
Inpatient Utilization Statistics for Mental Disorders
At Acute Care General Hospitals¹
October 1998 Through September 2001

		Admissions	Days	Admissions/ 10000	Days/10000	Average Length of Stay	Average Allowed Charge/Adm.	Average Allowed Charge/Day
<u>Non Copay</u>	<u>1999</u>	46	331	19.4	139.7	7.20	\$5,362	\$745
	<u>2000</u>	146	1,144	32.4	253.6	7.84	\$6,570	\$838
	<u>2001</u>	117	873	26.6	198.7	7.46	\$6,151	\$824
<u>Copay</u>	<u>1999</u>	40	275	36.8	253.1	6.88	\$5,426	\$789
	<u>2000</u>	74	646	35.5	309.7	8.73	\$6,916	\$792
	<u>2001</u>	68	504	27.9	206.8	7.41	\$6,885	\$929
<u>Ext Coverage</u>	<u>1999</u>	--	--	--	--	--	--	--
	<u>2000</u>	1	13	222.2	2,888.9	13.0	\$10,773	\$829
	<u>2001</u>	1	8	111.1	888.9	8.0	\$7,023	\$878
<u>Total</u>	<u>1999</u>	86	606	24.9	175.3	7.05	\$5,391	\$765
	<u>2000</u>	221	1,803	33.5	273.2	8.16	\$6,705	\$822
	<u>2001</u>	186	1,385	27.2	202.5	7.45	\$6,424	\$863
<u>Norm</u>		--	--	28.7	228.7	7.96	\$6,621	\$832

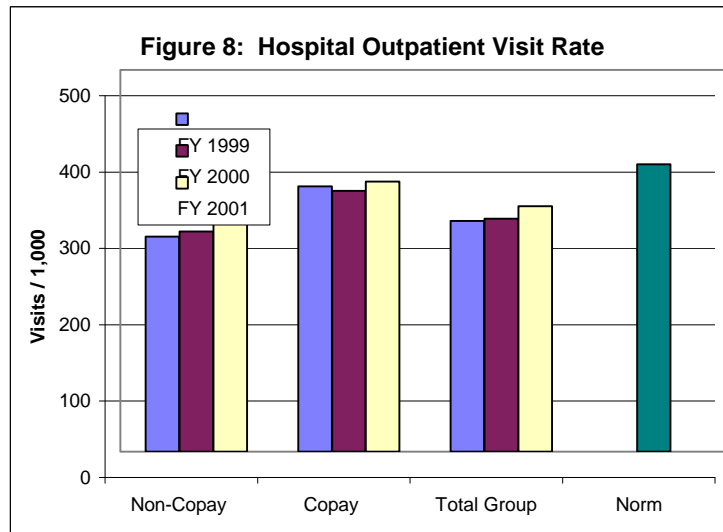
¹ Outlier claims (claims with a length of stay greater than 50 days or a total charge greater than \$30,000) have been excluded from these calculations.

Table 8
NC Health Choice
Inpatient Utilization Statistics for Mental Disorders
At Psychiatric Hospitals¹
October 1998 Through September 2001

		Admissions	Days	Admissions/ 10000	Days/10000	Average Length of Stay	Average Allowed Charge/Adm.	Average Allowed Charge/Day
<u>Non Copay</u>	<u>1999</u>	130	1,430	54.9	603.4	11.00	\$6,071	\$552
	<u>2000</u>	166	1,750	36.8	388.0	10.54	\$6,044	\$573
	<u>2001</u>	135	1,345	30.7	306.2	9.96	\$5,749	\$577
<u>Copay</u>	<u>1999</u>	37	368	34.1	338.7	9.95	\$5,704	\$573
	<u>2000</u>	72	976	34.5	467.9	13.56	\$6,068	\$448
	<u>2001</u>	65	499	26.7	204.8	7.68	\$4,849	\$632
<u>Ext Coverage</u>	<u>1999</u>	--	--	--	--	--	--	--
	<u>2000</u>	0	0	0.0	0.0	N/A	N/A	N/A
	<u>2001</u>	1	5	111.1	555.6	5.00	\$3,726	\$745
<u>Total</u>	<u>1999</u>	167	1,798	48.3	520.1	10.77	\$5,989	\$556
	<u>2000</u>	238	2,726	36.1	413.0	11.45	\$6,052	\$528
	<u>2001</u>	201	1,849	29.4	270.4	9.20	\$5,448	\$592
<u>Norm</u>		--	--	22.9	205.5	8.96	\$5,437	\$607

¹ Outlier claims (claims with a length of stay greater than 50 days or a total charge greater than \$30,000) have been excluded from these calculations.

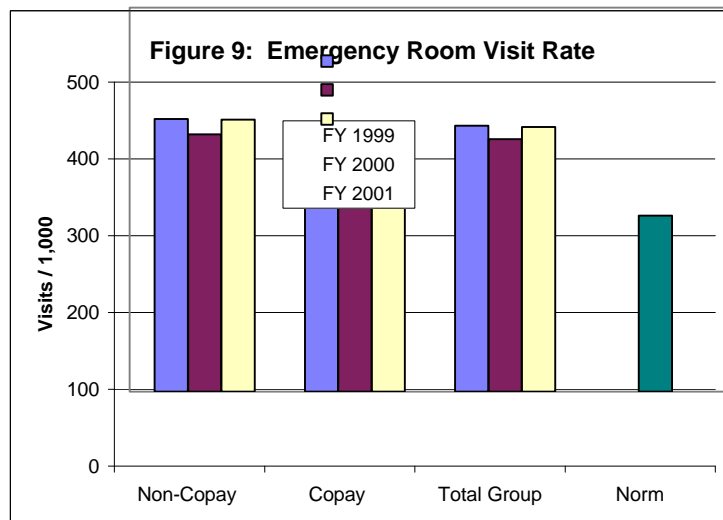
NC Health Choice Institutional Outpatient Utilization and Charges October 1998 Through September 2001



Utilization of the hospital outpatient setting increased 5 percent to 321.5 visits per 1,000 members in FY 2001 (Table 9). Utilization was 15 percent below the norm.

The visit rates for both the Copay and the Non-Copay segments increased slightly, with the Copay visit rate remaining above that of the Non-Copay segment.

The average charge per visit was \$822. This was higher than that of FY 2000 (\$754) but was lower than the norm (\$892).



For the emergency room (ER) setting, utilization increased 5 percent to 344.6 visits per 1,000 members in FY 2001.

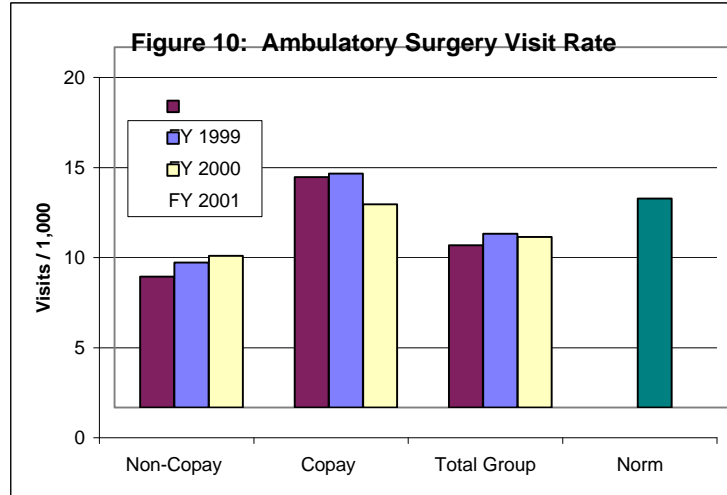
The ER visit rate increased for both segments, and remained well above the norm (50 percent higher).

Use of the ER setting for non-emergencies remained high (see Table 10) especially among the Non-Copay members.

There was a 9 percent increase in the average charge to \$465 per visit in FY 2001. This was 21 percent below the norm (\$586).

NC Health Choice Institutional Outpatient Utilization and Charges October 1998 Through September 2001

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The visit rate for the ambulatory surgery setting remained stable at 9.5 visits per 1,000 members in FY 2000 (Table 9).

Utilization by Copay members continued to exceed that of Non-Copay members.

The average charge per visit fell 6 percent from FY 2000 and was 7 percent below the norm.

Table 9
NC Health Choice
Institutional Outpatient Utilization and Charge Statistics
October 1998 Through September 2001

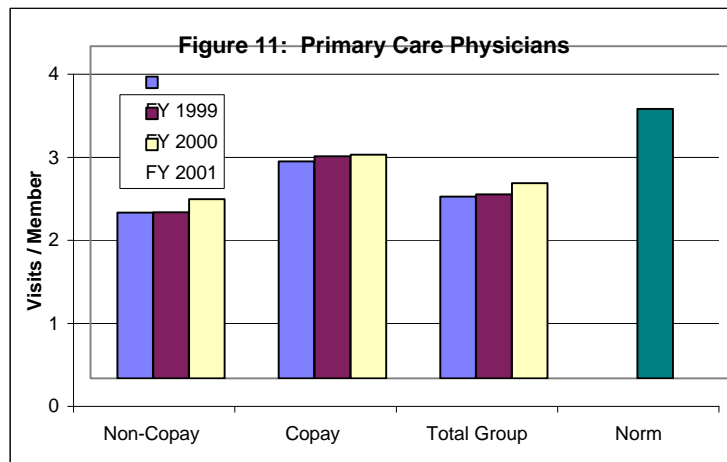
		Hospital Outpatient Dept.			Emergency Room			Ambulatory Surgical Centers		
		Visits	Visits/ 1,000	Av. Charge per Visit	Visits	Visits/ 1,000	Av. Charge per Visit	Visits	Visits/ 1,000	Av. Charge per Visit
<u>Non-Copay</u>	<u>FY 1999</u>	6,672	281.5	\$712	8,413	355.0	\$403	172	7.3	\$2,674
	<u>FY 2000</u>	13,001	288.2	\$730	15,115	335.1	\$419	363	8.0	\$2,838
	<u>FY 2001</u>	13,294	302.6	\$814	15,560	354.2	\$461	370	8.4	\$2,519
<u>Copay</u>	<u>FY 1999</u>	3,776	347.5	\$829	3,561	327.7	\$397	139	12.8	\$2,605
	<u>FY 2000</u>	7,125	341.6	\$797	6,584	315.6	\$438	271	13.0	\$2,720
	<u>FY 2001</u>	8,621	353.8	\$831	7,975	327.2	\$473	275	11.3	\$2,746
<u>Ext Coverage</u>	<u>FY 1999</u>	--	--	--	--	--	--	--	--	--
	<u>FY 2000</u>	23	511.1	\$1,172	12	266.7	\$265	3	66.7	\$3,974
	<u>FY 2001</u>	71	788.9	\$1,212	29	322.2	\$544	3	33.3	\$2,884
<u>Total Group</u>	<u>FY 1999</u>	10,448	302.3	\$754	11,974	346.4	\$401	311	9.0	\$2,643
	<u>FY 2000</u>	20,149	305.3	\$754	21,711	328.9	\$425	637	9.7	\$2,793
	<u>FY 2001</u>	21,986	321.5	\$822	23,564	344.6	\$465	648	9.5	\$2,617
<u>Norm</u>	<u>FY 2001</u>	--	376.5	\$892	--	229.3	\$586	--	11.6	\$2,806

Corporate Analysis and Risk Assessment
Blue Cross Blue Shield of North Carolina
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Table 10
NC Health Choice
Emergency Room Utilization Statistics
October 1998 Through September 2001

		<u>Total ER Utilization</u>			<u>Emergent</u>			<u>Urgent</u>			<u>Non-Urgent</u>		
		Visits	Visits/ 1,000	Charge per Visit	Visits	Visits/ 1,000	Charge per Visit	Visits	Visits/ 1,000	Charge per Visit	Visits	Visits/ 1,000	Charge per Visit
Non-Copay	FY 1999	8,413	355.0	\$403	1,715	72.4	\$613	3,584	151.2	\$351	3,114	131.4	\$346
	FY 2000	15,115	335.1	\$419	3,252	72.1	\$596	6,251	138.6	\$399	5,611	124.4	\$340
	FY 2001	15,560	354.2	\$461	2,973	67.7	\$679	6,586	149.9	\$440	6,000	136.6	\$377
Copay	FY 1999	3,561	327.7	\$397	768	70.7	\$598	1,637	150.7	\$362	1,156	106.4	\$312
	FY 2000	6,584	315.6	\$438	1,458	69.9	\$635	3,021	144.8	\$412	2,104	100.9	\$340
	FY 2001	7,975	327.2	\$473	1,679	68.9	\$704	3,501	143.7	\$440	2,793	114.6	\$375
Extended Coverage	FY 1999	--	--	--	--	--	--	--	--	--	--	--	--
	FY 2000	12	266.7	\$265	2	44.4	\$340	5	111.1	\$354	5	111.1	\$145
	FY 2001	29	322.2	\$544	4	44.4	\$758	11	122.2	\$590	14	155.6	\$447
Total	FY 1999	11,974	346.4	\$401	2,483	71.8	\$609	5,221	151.0	\$354	4,270	123.5	\$337
	FY 2000	21,711	328.9	\$425	4,712	71.4	\$608	9,277	140.5	\$403	7,720	117.0	\$340
	FY 2001	23,564	344.6	\$465	4,656	68.1	\$688	10,098	147.7	\$440	8,807	128.8	\$376
Norm		--	229.25	\$586	--	62.5	\$826	--	91.5	\$525	--	75.2	\$459

NC Health Choice Office Setting Utilization October 2000 Through September 2001

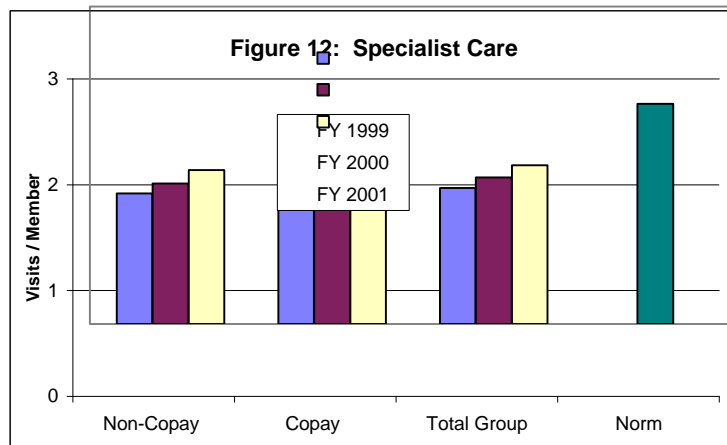


The primary care visit rate for the total group increased slightly to 2.3 visits per 1,000 members (Table 11). The rate was 28 percent below the norm.

The visit rate for the Non-Copay members rose 9 percent while that of the Copay members was relatively stable.

Top diagnoses included health supervision of infant or child (16 percent), acute pharyngitis (8 percent), acute upper respiratory infections (7 percent), and ear infections (7 percent).

The average charge per visit increased to \$63 in FY 2001.



The specialist care visit rate for the total group increased to 1.5 visits per 1,000 members. The rate was 28 percent below the norm.

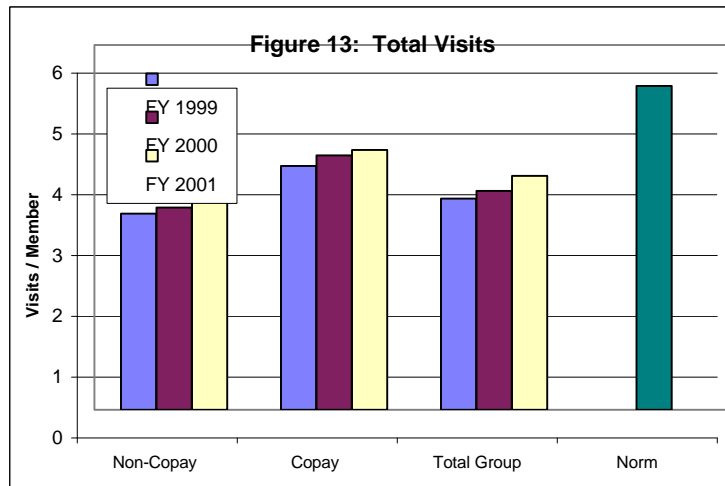
Both segments experienced increases in their visit rates during FY 2001.

Top diagnoses were vision disorders (9 percent) and allergic rhinitis (8 percent).

The most frequently visited specialists were chiropractors (11 percent).

The average charge per specialty visit increased to \$90.

NC Health Choice Office Setting Utilization October 2000 Through September 2001



The office visit rate for the total group increased 7 percent to 3.8 admissions per member. The rate was 28 percent below the norm.

The visit rate for the Non-Copay members rose 9 percent, and that of the Copay segment increased slightly in FY 2001.

The average charge per office visit in FY 2001 was \$74, an increase of \$4 since FY 2000.

Mental health outpatient utilization

Utilization of outpatient mental health services increased 14 percent in FY 2001 (Table 12). Although utilization rose for both segments, the increase was more pronounced among Copay members. Utilization was well above the norm.

There was a decline in the visit rate for alcohol abuse; however there was a 45 percent increase in the visit rate for drug abuse. Utilization rates for alcohol abuse treatment were below the norm, but drug abuse utilization rates were well above the norm, particularly for the Non-Copay segment, which had a visit rate roughly three times the norm.

Table 11
NC Health Choice
Office Utilization and Charge Statistics¹
October 1998 Through September 2001

		<u>Total</u>			<u>Primary Care</u>			<u>Specialist Care</u>		
		Visits	Visits/ person	Charge per Visit	Visits	Visits/ person	Charge per Visit	Visits	Visits/ person	Charge per Visit
Non-Copay	FY 1999	76,500	3.2	\$67	47,270	2.0	\$56	29,230	1.2	\$83
	FY 2000	150,120	3.3	\$71	90,277	2.0	\$59	59,843	1.3	\$87
	FY 2001	158,643	3.6	\$74	94,751	2.2	\$63	63,892	1.5	\$90
Copay	FY 1999	43,551	4.0	\$66	28,399	2.6	\$55	15,152	1.4	\$85
	FY 2000	87,230	4.2	\$69	55,766	2.7	\$58	31,464	1.5	\$87
	FY 2001	104,100	4.3	\$73	65,641	2.7	\$63	38,459	1.6	\$90
Extended Coverage	FY 1999	--	--	--	--	--	--	--	--	--
	FY 2000	270	6.0	\$79	153	3.4	\$57	117	2.6	\$107
	FY 2001	550	6.1	\$67	306	3.4	\$61	244	2.7	\$75
Total	FY 1999	120,051	3.5	\$66	75,669	2.2	\$56	44,382	1.3	\$84
	FY 2000	237,620	3.6	\$70	146,196	2.2	\$59	91,424	1.4	\$87
	FY 2001	263,293	3.8	\$74	160,698	2.3	\$63	102,595	1.5	\$90
Norm		--	5.3	\$77	--	3.2	\$66	--	2.1	\$94

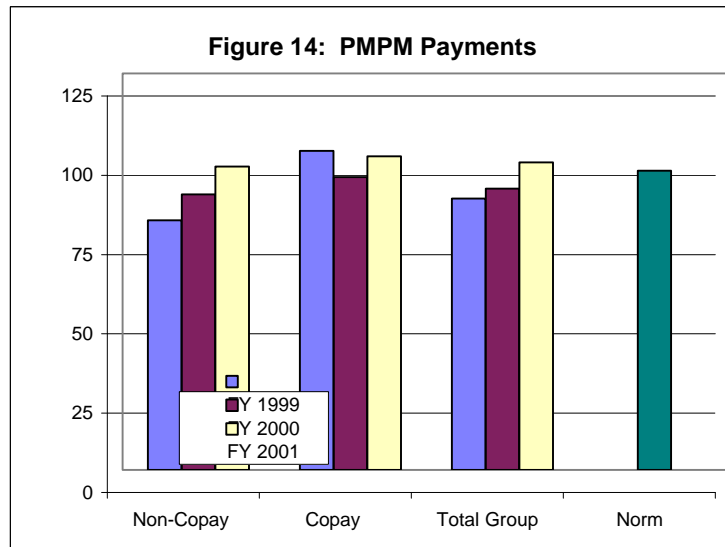
¹ Excludes mental health.

Corporate Analysis and Risk Assessment
Blue Cross Blue Shield of North Carolina
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Table 12
NC Health Choice
Outpatient Mental Health Utilization Statistics
October 1998 Through September 2001

		Mental Health		Alcohol Abuse		Drug Abuse		Grand Total	
		Visits/ 1,000	Visits/ Member with at least One Visit	Visits/ 1,000	Visits/ Member with at least One Visit	Visits/ 1,000	Visits/ Member with at least One Visit	Visits/ 1,000	Visits/ Member with at least One Visit
Non- Copay	FY 1999	633.6	5.5	0.3	1.3	18.9	18.7	652.9	5.7
	FY 2000	807.7	6.7	1.9	6.0	11.4	12.6	821.0	6.7
	FY 2001	901.0	7.2	1.8	5.7	17.0	14.6	919.8	7.3
Copay	FY 1999	609.9	5.9	0.6	2.3	36.6	24.9	647.2	6.2
	FY 2000	750.7	6.5	0.6	1.7	6.0	7.4	757.2	6.5
	FY 2001	910.3	7.7	0.5	1.6	8.9	8.4	919.7	7.7
Extended Coverage	FY 1999	--	--	--	--	--	--	--	--
	FY 2000	3,888.9	9.2	0.0	0.0	0.0	0.0	3,888.9	9.2
	FY 2001	1,188.9	5.4	0.0	0.0	0.0	0.0	1,188.9	5.4
Total	FY 1999	626.2	5.7	0.4	1.7	24.5	21.2	651.1	5.8
	FY 2000	791.8	6.8	1.5	4.6	9.7	11.1	803.0	6.9
	FY 2001	904.7	7.7	1.3	4.3	14.1	13.0	920.1	7.7
Norm		807.1	7.1	1.9	5.6	5.6	6.2	814.7	7.1

NC Health Choice Payments Per Member Per Month October 1998 Through September 2001



The payment per member per month (pmpm) for the total group increased during FY 2001 to \$96.93 (Table 13). This was higher than the norm.

Payments for the Non-Copay segment increased 10 percent, and those of the Copay segment increased 7 percent.

For the Non-Copay segment, professional payments grew by \$7 reflecting a significant rise in payments for office visits and prescription drugs.

For the Copay members, institutional payments rose \$2 reflecting an increase in outpatient utilization. Professional payments increased \$5, again due to higher payments for office visits and prescription drugs.

Institutional payments for both segments were below the norm. Professional payments exceeded the norm.

Payments for several diagnostic categories were significantly higher than the norm (Table 15). Payments for mental disorders, diseases of the nervous system, respiratory diseases, ill defined conditions, and other (including drugs) were all higher than the norm. Payments in the respiratory diseases and the other (including drugs) category increased significantly, while the remaining categories of payments each changed by less than \$2 PMPM compared with FY 2000 (data not shown).

Dental payments (which were not included in the figures above) were \$12 per member per month in FY 2001 (Table 16). Payments increased by about \$2 since FY 2000 (data not shown).

Payments for special needs claims nearly doubled, amounting to a little less than \$2 PMPM (FY 2000 data not shown).

Costly admissions (admissions which incurred costs greater than \$50,000 or hospital stays greater than 30 days) added nearly \$2 to the PMPM payment (Table 17). This number is less than half of the FY 2000 payment PMPM for costly admissions (2000 data not shown).

Table 13
NC Health Choice
Per Member per Month Payments, by Place of Service
October 1998 Through September 2001

		<u>Institutional</u>					<u>Professional</u>					<u>Grand Total</u>	
		<u>Acute Care</u>		<u>Specialty</u>		<u>Total</u>						<u>Total</u>	
		<u>Inpatient</u>	<u>Outpatient</u>	<u>Inpatient</u>	<u>Outpatient</u>	<u>Institutional</u>	<u>Inpatient</u>	<u>Outpatient</u>	<u>Office</u>	<u>Drugs</u>	<u>Other</u>	<u>Professional</u>	
Non-Copay	FY 1999	\$10.58	\$18.32	\$2.80	\$0.77	\$32.47	\$3.07	\$9.50	\$22.34	\$9.90	\$1.46	\$46.26	\$78.73
	FY 2000	\$11.86	\$18.84	\$1.81	\$0.53	\$33.05	\$3.26	\$9.36	\$24.75	\$14.17	\$2.22	\$53.77	\$86.82
	FY 2001	\$10.47	\$22.36	\$1.34	\$0.57	\$34.17	\$3.10	\$10.29	\$28.20	\$17.46	\$1.81	\$60.86	\$95.03
Copay	FY 1999	\$24.46	\$22.02	\$2.45	\$0.74	\$49.67	\$5.14	\$11.42	\$24.87	\$7.77	\$1.70	\$50.90	\$100.57
	FY 2000	\$11.66	\$21.70	\$1.61	\$0.61	\$35.58	\$4.09	\$10.93	\$27.43	\$11.71	\$2.57	\$56.72	\$92.31
	FY 2001	\$10.75	\$24.32	\$1.80	\$0.52	\$37.38	\$3.10	\$11.13	\$30.16	\$14.00	\$3.13	\$61.53	\$98.91
Ext Cov	FY 1999	--	--	--	--	--	--	--	--	--	--	--	--
	FY 2000	\$40.73	\$41.50	\$0.00	\$0.00	\$82.23	\$6.37	\$22.90	\$61.02	\$24.23	\$4.05	\$118.57	\$200.80
	FY 2001	\$22.14	\$55.47	\$2.68	\$1.10	\$81.38	\$6.00	\$33.86	\$39.46	\$37.33	\$9.99	\$126.64	\$208.02
Total	FY 1999	\$14.94	\$19.48	\$2.69	\$0.76	\$37.88	\$3.72	\$10.10	\$23.13	\$9.23	\$1.53	\$47.72	\$85.60
	FY 2000	\$11.82	\$19.76	\$1.75	\$0.56	\$33.89	\$3.52	\$9.87	\$25.62	\$13.40	\$2.33	\$54.75	\$88.63
	FY 2001	\$10.59	\$23.10	\$1.50	\$0.56	\$35.75	\$3.11	\$10.62	\$28.91	\$16.25	\$2.29	\$61.18	\$96.93
Norm		\$20.98	\$19.16	\$1.12	\$1.16	\$42.42	\$5.48	\$8.58	\$19.63	\$14.78	\$3.48	\$51.95	\$94.37

Table 14
NC Health Choice
Total Payments by Place of Service
October 1998 Through September 2001

		<u>Institutional</u>					<u>Professional</u>					
		<u>Acute Care</u>		<u>Specialty</u>								
		<u>Inpatient</u>	<u>Outpatient</u>	<u>Inpatient</u>	<u>Outpatient</u>	<u>Total Institutional</u>	<u>Inpatient</u>	<u>Outpatient</u>	<u>Office</u>	<u>Drugs</u>	<u>Other</u>	<u>Total Professional</u>
Non-Copay	FY 1999	\$3,009,090	\$5,209,459	\$795,946	\$220,152	\$9,234,647	\$873,959	\$2,700,958	\$6,353,170	\$2,814,875	\$414,792	\$13,157,755
	FY 2000	\$6,420,544	\$10,199,207	\$981,923	\$288,732	\$17,890,407	\$1,763,813	\$5,067,905	\$13,393,602	\$7,670,908	\$1,204,004	\$29,100,233
	FY 2001	\$5,520,914	\$11,786,816	\$705,236	\$302,394	\$18,012,966	\$1,635,439	\$5,422,013	\$14,864,606	\$9,204,535	\$953,161	\$32,079,754
Copay	FY 1999	\$3,190,011	\$2,870,683	\$319,653	\$96,328	\$6,476,675	\$669,735	\$1,488,426	\$3,242,786	\$1,013,484	\$221,925	\$6,636,355
	FY 2000	\$2,918,512	\$5,432,542	\$403,531	\$152,624	\$8,907,208	\$1,023,350	\$2,736,185	\$6,865,702	\$2,931,096	\$642,318	\$14,198,651
	FY 2001	\$3,142,592	\$7,112,098	\$525,096	\$152,563	\$10,932,350	\$907,614	\$3,255,915	\$8,820,224	\$4,093,511	\$915,803	\$17,993,066
Ext Cov	FY 1999	--	--	--	--	--	--	--	--	--	--	--
	FY 2000	\$21,995	\$22,411	\$0	\$0	\$44,406	\$3,441	\$12,368	\$32,950	\$13,083	\$2,186	\$64,029
	FY 2001	\$23,909	\$59,902	\$2,895	\$1,186	\$87,892	\$6,480	\$36,569	\$42,615	\$40,315	\$10,791	\$136,770
Total	FY 1999	\$6,199,101	\$8,080,142	\$1,115,598	\$316,480	\$15,711,322	\$1,543,694	\$4,189,383	\$9,595,956	\$3,828,359	\$636,717	\$19,794,110
	FY 2000	\$9,361,051	\$15,654,160	\$1,385,454	\$441,356	\$26,842,021	\$2,790,604	\$7,816,458	\$20,292,254	\$10,615,087	\$1,848,508	\$43,362,913
	FY 2001	\$8,687,415	\$18,958,817	\$1,233,228	\$456,142	\$29,335,602	\$2,549,532	\$8,714,496	\$23,727,445	\$13,338,361	\$1,879,755	\$50,209,589

Table 15
NC Health Choice
PMPM Payments by Diagnostic Category
October 2000 Through September 2001

	<u>Total Payments</u>	<u>Payments per Member per</u> <u>Month</u>	
	<u>NCHC</u>	<u>NCHC</u>	<u>Norm</u>
Infectious and Parasitic Diseases	\$2,262,582	\$2.76	\$1.73
Neoplasms	\$1,666,539	\$2.03	\$3.48
Endocrine, Nutritional and Metabolic Diseases and Immunity Disorders	\$1,274,707	\$1.55	\$1.61
Diseases of Blood and Blood-Forming Organs	\$1,110,284	\$1.35	\$2.18
Mental Disorders	\$7,316,820	\$8.92	\$6.06
Diseases of the Nervous System and Sense Organs	\$7,670,661	\$9.35	\$6.13
Circulatory Diseases	\$1,136,675	\$1.39	\$1.86
Respiratory Diseases	\$10,640,277	\$12.97	\$7.28
Digestive Diseases	\$3,967,954	\$4.84	\$3.74
Genitourinary Diseases	\$2,615,394	\$3.19	\$2.19
Pregnancies	\$161,364	\$0.20	\$0.24
Skin Diseases	\$1,321,092	\$1.61	\$0.97
Musculoskeletal Diseases	\$3,572,957	\$4.35	\$5.07
Congenital Anomalies	\$1,779,589	\$2.17	\$5.44
Perinatal Conditions	\$43,199	\$0.05	\$9.13
Ill-Defined Conditions	\$7,304,404	\$8.90	\$5.68
Injury and Poisoning	\$9,495,884	\$11.57	\$11.09
Other (Includes Drugs)	\$16,204,808	\$19.75	\$5.76

Table 16
NC Health Choice
Frequency and Costs of Select Office Procedures
October 2000 Through September 2001

	<u>Non-Copay</u>	<u>Copay</u>	<u>Total Group</u>
Dental			
Claims	111,340	61,086	172,633
Payments PMPM	\$12.55	\$12.23	\$12.44
Hearing			
Claims	49	41	110
Payments PMPM	\$0.05	\$0.04	\$0.04
Immunization			
Claims	5,160	5,794	10,973
Payments PMPM	\$0.13	\$0.25	\$0.17
Vision			
Claims	9,262	4,423	13,712
Payments PMPM	\$1.18	\$0.94	\$1.09
Well Child			
Claims	10,502	8,628	19,210
Payments PMPM	\$1.15	\$1.64	\$1.32
Special Needs ¹			
Claims	12,952	7,825	20,847
Payments PMPM	\$1.60	\$1.86	\$1.69

¹ Includes institutional as well as professional claims.

Table 17
NC Health Choice
Catastrophic Admissions¹ to Acute Care Hospitals
October 2000 Through September 2001

<u>Diagnosis</u>	<u>APDRG</u>	<u>Age</u>	<u>Sex</u>	<u>Length of Stay</u>	<u>Charged</u>	<u>Paid</u>	<u>Provider</u>	<u>Transplant</u>	<u>Segment</u>
HEART DISEASE	103	12	F	23	\$163,673	\$185,549	UNC HOSPITALS	HEART	Non-Copay
HEART FAILURE	103	2	F	28	\$162,501	\$187,045	UNC HOSPITALS	HEART	Non-Copay
COMPLICATIONS OF ORGAN TRANSPLA	574	16	M	77	\$142,707	\$142,707	PITT CO MEMORIAL		Non-Copay
OTHER HEMORRHAGIC CONDITIONS	803	9	F	52	\$136,274	\$135,656	DUKE UNIVERSITY HOSPITAL	BONE MARROW	Copay
DISLOCATED VERTEBRA	483	18	F	41	\$115,095	\$115,095	OUT-OF-STATE		Non-Copay
CANCER OF RESPIRATORY ORGANS	541	15	F	65	\$109,426	\$109,426	UNC HOSPITALS		Non-Copay
BONE CANCER	471	15	F	22	\$93,547	\$93,547	UNC HOSPITALS		Non-Copay
BRAIN CANCER	530	2	F	36	\$87,292	\$84,226	PITT CO MEMORIAL		Copay
SCOLIOSIS	756	12	F	16	\$77,886	\$77,886	NC BAPTIST		Copay
THORACIC ANEURYSM	545	16	M	14	\$73,237	\$73,129	MEMORIAL MISSION		Non-Copay
SKULL FRACTURE	530	13	M	17	\$66,629	\$63,718	DUKE UNIVERSITY HOSPITAL		Non-Copay
SKULL FRACTURE	530	2	F	16	\$64,841	\$64,622	CAROLINAS MED CTR		Non-Copay
HYPERTENSIVE RENAL DISEASE	468	13	F	25	\$60,342	\$60,337	PITT CO MEMORIAL		Copay
COMPLICATIONS OF MEDICAL DEVICE	105	16	F	5	\$51,947	\$51,185	UNC HOSPITALS		Copay
CONDUCT DISTURBANCE	431	14	M	52	\$34,554	\$3,407	OUT-OF-STATE		Non-Copay
MANIC-DEPRESSIVE PSYCHOSIS	430	8	M	34	\$26,291	\$25,050	UNC HOSPITALS		Non-Copay
HEART FAILURE	544	2	F	33	\$23,374	\$23,018	UNC HOSPITALS	HEART	Non-Copay
SCHIZOPHRENIA	430	18	M	32	\$19,417	\$18,130	FRYE MEDICAL CTR		Non-Copay
COMPLICATIONS OF ORGAN TRANSPLA	574	16	M	32	\$16,283	\$15,912	PITT CO MEMORIAL		Non-Copay
MALNUTRITION	753	18	F	37	\$6,753	\$32,298	PARK RIDGE		Copay

¹ Admissions with allowed charges exceeding \$50,000 or length of stay greater than 30 days.